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**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| Replacement of Part 90 by Part 88 to | ) | |
| Revise the Private Land Mobile Radio | ) | PR Docket No. 92-235 |
| Services and Modify the Policies | ) | |
| Governing Them | ) | |
| | ) | |
| and | ) | |
| | ) | |
| Examination of Exclusivity and | ) | |
| Frequency Assignment Policies of | ) | |
| The Private Land Mobile Radio Services | ) | |

To: The Commission

**COMMENTS OF THE**
**AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.**

Respectfully submitted,

AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

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## SUMMARY

The American Mobile Telecommunications Association ("AMTA" or "Association") supports the Commission's efforts to create a regulatory environment that will encourage the introduction of more efficient technologies in the private land mobile bands at 150 MHz, 450 MHz and 470-512 MHz. Having adopted a new channelization plan and more flexible technical provisions in those bands, the FCC now seeks to implement market-based incentives that will induce users to implement advanced technologies consistent with their individual communications requirements. Specifically, the instant Further Notice of Proposed Rule Making ("FNPR") considers the concepts of channel exclusivity with resale opportunities, user fees and competitive bidding as techniques useful in achieving the Commission's objectives. It also recognizes the vital role third-party commercial providers can play in providing highly efficient, technologically advanced service offerings to a significant number of users.

Although AMTA endorses the Commission's objectives in the instant proceeding, and agrees fully with its assessment of the positive role that might be played by commercial operators, the Association is not persuaded that any of the approaches recommended will prove effective in the intensely populated bands under consideration. The geographically random siting of stations and intensive reuse of shared frequencies in these bands present substantial practical obstacles to the creation of channel exclusivity even in the current licensing environment. These difficulties will increase significantly once the FCC authorizes primary use of newly created or heretofore secondary "narrowband" frequencies in addition to the existing "full" channels. Unless the rules

direct that users retaining less efficient technology must accept secondary status by a date certain and provide prospective commercial providers with adequate regulatory tools to clear sufficient spectrum in a reasonable timeframe, AMTA believes it unlikely that entrepreneurs will assume the positive, significant role that they have played in the 800 MHz and 900 MHz bands, irrespective of the possibility of reselling excess capacity.

AMTA also has reservations regarding the FNPR proposals to employ users fees and/or competitive bidding as an incentive for users to adopt more efficient technologies. Neither approach is statutorily permitted today, although Congress may expand the Commission's authority to include both in the short term future. The Association also is concerned that setting user fees at a level sufficient to discourage inefficient spectrum utilization might encourage users to avoid the license process altogether. In addition, the practical difficulties of identifying instances of mutual exclusivity on highly congested, shared spectrum would be significant if the FCC attempted to employ competitive bidding techniques in these bands. Finally, if the FCC nonetheless elects to award overlay licenses by competitive bidding, it should not co-mingle applicants for commercial and internal systems in a single auction.

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To: The Commission

## COMMENTS OF THE AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

1. The American Mobile Telecommunications Association, Inc. ("AMTA" or "Association"), in accordance with Section 1.415 of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations, respectfully submits its Comments in the above-entitled proceeding.[1/] AMTA supports Commission efforts, such as that in the instant proceeding, to develop a regulatory environment that will facilitate the more efficient use of land mobile spectrum for the benefit of existing and future users. However, the Association is not persuaded that the regulatory framework proposed herein is adequate to prompt a timely, orderly migration from current technologies to those that could produce more technically advanced use of this highly congested spectrum.

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[1/] Report and Order and Further Notice of Proposed Rule Making, PR Docket No. 92-235, 10 FCC Rcd 10076 (1995)("FNPR").

## I. INTRODUCTION

2. AMTA is a nationwide, non-profit trade association dedicated to the interests of the specialized wireless communications industry.[2/] The Association's members include trunked and conventional 800 MHz and 900 MHz Specialized Mobile Radio ("SMR") operators, licensees of wide-area SMR systems, and commercial licensees in the 220 MHz band. Many of AMTA's members also operate two-way private carrier or community repeater systems in the 450-470 MHz band, typically using frequencies assigned to the Business Radio Service. Collectively, these members provide commercial wireless services throughout the country, and have been at the forefront of the introduction of technically advanced systems to what had been classified as the private land mobile community. Thus, AMTA has a significant interest in the outcome of this proceeding.

3. AMTA is also a member of the Land Mobile Communications Council ("LMCC") and has participated actively in that organization's deliberations regarding the issues raised in this proceeding. The Association supports the LMCC's Comments on the FNPR except to the extent that they are inconsistent with the recommendations herein.

## II. BACKGROUND

4. The instant FNPR is a further step in the Commission's multi-stage effort to ensure the availability of sufficient capacity and technical sophistication to satisfy

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[2/] These interests typically were classified as private carriers prior to 1993. Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, Title VI § 6002(b), 107 Stat. 312, 392 (1993).

essential private wireless services into the next century. The FCC has recognized that we have entered an era of unparalleled growth in the demand for wireless communications capability and in technological advances with the potential to provide significant improvements in wireless spectrum efficiencies. FNPR at ¶ 2. This Commission initiative focuses on regulatory and technical methods for achieving more efficient and flexible use of the 150 MHz, 450 MHz and 470-512 MHz bands assigned for private land mobile use. The accompanying Report and Order in this proceeding adopted rules for a new channeling plan and greater technical flexibility in those bands which would permit the implementation of more efficient equipment as dictated by the individual, diverse needs of this vast, heterogeneous radio community.

5. However, the agency has also acknowledged the complexities of introducing innovative technologies into this extraordinarily congested radio environment, populated by hundreds of thousands of individually licensed systems operating almost exclusively on shared channels with an embedded equipment investment exceeding $25 billion dollars. Id. The Commission has not proposed either a mandated migration of users employing traditional technologies to other bands or even a specific deadline after which licensees must implement more efficient equipment or be relegated to secondary status. Instead, the FCC has determined to rely on an incentive approach to introducing greater technical efficiencies into these bands.[3/] In conjunction with the channeling plan

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[3/] In one respect, the Commission's goal of encouraging efficient and intensive use of this spectrum can be viewed as misplaced. If "spectrum efficiency" is defined in terms of number of users and transmissions accommodated in a specific amount of spectrum, it is likely that the services and bands under consideration in this proceeding already exceed quite substantially the "efficiencies" achieved in other wireless services.

and technical flexibility provided for in the newly-adopted rules, the Commission proposes to employ "market-based" incentives to encourage the implementation of this more efficient and flexible equipment.

6. Specifically, the FNPR proposes that provisions such as exclusivity with the right of resale, spectrum fees and competitive bidding will encourage both existing licensees and new entrants to make efficient equipment selections, consistent with their individual system requirements, by associating an economic cost with the continued use of less efficient technologies. FNPR at ¶ 110. It suggests that these approaches will "provide users with appropriate incentives to employ the most advanced technology and maximize the efficient use of the spectrum." FNPR at ¶ 4. The FNPR also notes that third-party commercial carriers have been successful in satisfying the private communications requirements of certain users and frequently have been aggressive in the introduction of highly efficient technologies. Id.

## III. DISCUSSION

### A. The FNPR Properly Recognizes Several Vital Objectives

7. AMTA supports the Commission's objectives in this proceeding. The unceasing demand for wireless communications capabilities dictates that the most efficient use be made of available spectrum resources. At the same time, the equipment manufacturing industry continues to improve the quality of wireless offerings and to expand the scope of services that can be provided. To the extent that the private land mobile community can be incentivized to adopt these more efficient and effective

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However, this "efficiency" comes at the cost of a lesser grade of service.

technologies, existing and prospective users will enjoy superior quality of service and a rich array of service offerings. Moreover, to the extent that the approaches proposed in this proceeding will reduce the Commission's licensing burden, both the public and the agency will benefit.

8. Additionally, AMTA concurs with the FCC's assessment of the valuable role third-party providers can play in helping achieve these laudable objectives. The original third-party private carrier, the 800 MHz SMR, was created for precisely this reason. In the late 1960s, the Commission determined that the burgeoning demand for private land mobile communications capability would significantly exceed the available spectrum supply unless users could be induced to employ more efficient equipment -- specifically multi-channel, trunked technology.[4/] In conjunction with its reallocation of the upper UHF television band to the land mobile services, both private and cellular, the FCC created the third-party SMR provider and gave this new category of licensee the incentive to invest in more advanced, but significantly more expensive, trunked technology.

9. The success of that Commission initiative is undisputed. Third-party SMR systems at 800 MHz and 900 MHz, as well as commercial trunked systems in the 220 MHz band, have provided and will continue to provide highly efficient, technically advanced, service rich, cost-effective communications capabilities to significant numbers of private land mobile users. The customers on these facilities typically have neither the expertise nor the interest in operating and maintaining their own, individual radio

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[4/] Second Report and Order, Docket No. 18262, 46 FCC 2d 752 (1974).

systems. Their fleets often are relatively small. Their communications requirements are insufficient to justify investing in more efficient, more expensive equipment on their own, and they have little or no ability to identify similarly situated entities with which they might upgrade on a cooperative basis.

10. Instead, the SMR filled that function. The third-party commercial provider had both the incentive for and the capability of implementing highly efficient equipment which would maximize the number of subscribers served on the spectrum and improve the quality of that service since doing so presumably would enhance the profits derived from the system. Although AMTA is not persuaded that the regulatory approach proposed for the bands at issue herein will permit the deployment of third-party systems on a scale sufficient to attract entrepreneurial attention, the Association is confident that, should such systems be broadly deployed, the results would equal the success achieved at 800 MHz, 900 MHz and 220 MHz.

11. AMTA supports the more ubiquitous availability of third-party systems in these bands mindful of the important role played by independent, internal systems. There unquestionably are entities whose communications requirements will be satisfied best by operating their own systems rather than relying on commercial operators. The Association is encouraged by the Commission's recognition in this proceeding of the vital role played by such systems. Id. at ¶ 4. Maintenance of the proper balance between third-party and internal systems will permit satisfaction of the diverse needs of the broad array of private land mobile users.

### B. The FNPR's Market-Based Incentives to Employ More Efficient Technologies May Not Prove Effective in These Spectrum Bands

1. Exclusivity with Resale Opportunities.

12. Private land mobile channels in the bands under consideration, with limited exceptions, are shared frequencies.[5/] This fact lies at the core of the complexity of the instant proposal. Frequencies in these bands typically are used by multiple licensees in each geographic area with parties sharing the channel on a party line-type basis. Some of the systems may be co-located as in the case of the 450 MHz community repeater wherein the repeater itself is multiply licensed. However, in many instances, frequencies support more than a single licensee, each of which is authorized to operate at a different location. The service contours of these facilities overlap to greater or lesser degrees, a fact which to date has been of no import since none of the licensees is entitled to exclusive use of the channel within a defined service area. In geographic areas like the East and West Coasts, where substantial sized markets exist in relatively close proximity to one another, these systems produce extensive daisy chains of overlapping coverage.

13. The geographically random siting of stations and intensive reuse of shared frequencies in these bands will make it extraordinarily difficult, both practically and economically daunting, for parties to clear enough spectrum to achieve exclusivity and

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[5/] Licensees on frequencies in the 470-512 MHz band may obtain exclusivity if they meet specified levels of channel utilization based on mobile loading. 47 C.F.R. § 90.313. Because there are exclusivity provisions in this band, because protection of television transmissions have strictly limited the geographic areas within which the systems can be licensed, and because the FCC has never authorized use of the 12.5 KHz channels offset from these channels, this band offers the most realistic opportunity for the approach proposed in the FNPR.

thereby the ability to implement technologies such as trunking which are not compatible with shared channel usage.

14. The difficulty of the task will be increased exponentially once the Commission authorizes primary use of newly created or heretofore secondary "narrowband" channels adjacent to current primary frequencies. Pursuant to the new channeling plan, the addition of this "frequency daisy chain" to the existing geographic daisy chain will further impede the ability of an entity to clear enough spectrum over a sufficient geographic area to justify the investment in doing so. Entrepreneurs need not only a profit motive, such as the right to resell excess capacity, but a viable approach to attaining the objective at some reasonable cost and within some reasonable time period. At this stage of this proceeding, given the highly intensive utilization of the spectrum and the extensive overlapping of individual system coverage, AMTA is unable to identify a realistic path to achieve channel exclusivity, except perhaps in the 470-512 MHz band. Without the possibility of implementing technologies that demand exclusive channel use, there is little likelihood that third-party providers will have sufficient incentive to clear this spectrum in the radio services and the geographic areas where enhanced spectral efficiency is most urgently needed.

15. Licensees that currently enjoy de facto channel exclusivity might be able to take advantage of the FNPR's proposed provisions although it is not evident that they would do so. Typically these are entities in radio services that have had very limited eligibility, such as the Railroad, Power and Petroleum Radio Services, or those in sparsely populated regions of the country where demand is so limited that frequencies do

not have to be shared. The latter are not likely to pursue third-party entrepreneurial activities given the same limited customer base that permitted them to retain exclusive use of their channels. The former are more probable candidates, assuming the Commission consolidates the existing radio services into a smaller number of categories with broader eligibility provisions.

16. Even then, however, it is far from evident that this approach would be pursued actively. The entities positioned to do so are not in the communications business. They rely on communications to enhance their operating productivity, and thereby their bottom line, not as an independent profit making activity. While some may elect to implement advanced technologies so that they may resell their extra capacity, the more likely motivation for greater spectrum efficiency is a need devolved from their primary business operation. Resale of excess capacity is an activity outside their normal line of business with costs and responsibilities that must be weighed against the likely profit, including the likelihood of being classified as Commercial Mobile Radio Service ("CMRS") with its as yet unknown panoply of regulatory obligations.

17. In AMTA's opinion, unless the rules require users electing to operate less efficient technology to accept secondary status at a specific point in time and provide entrepreneurs with the regulatory tools needed to clear a reasonable amount of spectrum in a realistic timeframe, it is unlikely that third-party providers will play the role in this band that they have at 800 MHz, 900 MHz and 220 MHz. They will not deploy technically advanced, more spectrally efficient systems for users in the most congested radio services and in the most congested geographic areas.

2. User Fees.

18. The Commission also has proposed to employ user fees to encourage the more efficient use of private land mobile spectrum. Specifically, the FNPR suggests that higher user fees might be assessed against those who continue to utilize less efficient technology. FNPR at ¶¶ 136-140. AMTA agrees that this approach may be an effective means of promoting implementation of more advanced technologies, but its support for the concept is limited as described below.

19. First, the Commission does not yet have statutory authority to collect fees from licensees for the use of their spectrum. Id. at ¶ 136. Whatever potential such a concept might promise, it cannot be undertaken unless and until Congress provides the agency with statutory authority to proceed. Assuming, as AMTA does, that Congress will do so in the near term future, the Association still have reservations about the efficacy of this approach for all classes of users.

20. By definition, user fees may be imposed only on those entities the Commission is able to identify as users of spectrum. Typically, the FCC becomes aware of their existence and assesses whatever fees are appropriate when the parties show up at the FCC seeking whatever governmental approval is needed to operate their communications facilities. The FCC and the industry already are aware that a significant number of private land mobile users operate their systems without securing FCC authority to do so. In some instances, they simply are unaware that they are required to obtain an FCC license since their communications system is a tool about which they have only imperfect knowledge, not their primary business. Other parties find the

cumulative costs of obtaining the FCC license sufficiently substantial, sometimes more than the cost of the equipment itself, that they elect to operate without it and accept the risk that they may be caught and fined. As shrinking FCC resources result in more limited in-field enforcement activity, that risk likely is diminishing.

21. Users who are unaware of or elect to flout the licensing requirement are frequently the smaller Business or Special Industrial Radio eligibles operating on highly congested frequencies in large market areas -- the very users whose need for more efficient technology is greatest. Thus, even if the Commission is statutorily empowered to collect user fees, it may find that setting them high enough to induce investment in new equipment may just as likely act as a deterrent to licensing for some subset of the private land mobile community. These users not only will retain their less efficient equipment, but they will operate without benefit of license making them almost impossible for a third-party provider to identify and attempt to clear from the channel.

3. Competitive Bidding

22. The third market-based incentive proposed in the FNPR is competitive bidding, or auctions. The Commission has suggested that it might award "geographic overlay licenses" by this method, FNPR at ¶ 141, but also has recognized that its "ability to introduce auctions for PLMR [private land mobile radio] licenses is complicated by the current shared use environment and by the large numbers of incumbents licensed on some channels in some areas." Id at ¶ 142. Additionally, like user fees, the Commission currently lacks statutory authority to implement this proposal. Its authority to employ competitive bidding, at the moment, is limited to licensees providing

subscriber-based services. Since these bands are occupied largely by licensees operating internal communications systems, the use of auctions is prohibited.

23. Like the Commission, AMTA anticipates that Congress may expand the agency's auction authority to include non-subscriber-based services. However, even if it does, the Association is not persuaded that the very heavily encumbered bands under consideration herein present a viable competitive bidding opportunity. As described above, there is no clear practical path for channel clearing by third-party providers even if they are permitted to do so under the FCC's rules. Without the likelihood of obtaining sufficient unencumbered spectrum over a desirable geographic area, entrepreneurs are not likely to participate in competitive bidding for the exclusive use overlay licenses envisioned by the Commission. Finally, if the Commission should elect to proceed with this approach, AMTA recommends strongly that applicants for commercial and internal systems not be co-mingled in a single auction. Doing so would upset the appropriate balance between third-party and private internal systems discussed above.

## IV. CONCLUSION

24. The Commission's objectives in the instant FNPR are laudable. The interests of current and future private land mobile users will require creative approaches to improving spectrum efficiency and enhancing service quality. The Association appreciates the enormous complexities of attempting to achieve these results in the intensively populated bands at issue in this proceeding.

25. Nonetheless, AMTA is not persuaded that the market-based incentives proposed in the FNPR offer practical inducements for investment in more advanced

technologies, whether by incumbents or new entrants, by commercial or internal operators. Recognizing the importance of this initiative, AMTA intends to continue working with the Commission, the LMCC, and the entire private land mobile community on a regulatory approach which will "chart the course to meet the future demand for private wireless services."

## CERTIFICATE OF SERVICE

I, Cheri Skewis, a secretary in the law office of Lukas, McGowan, Nace & Gutierrez, hereby certify that I have, on this 20th day of November, 1995, caused to have hand delivered a copy of the foregoing Comments to the following:

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